

Abstract:

A method and a system for cleaning the glass surface of an object, such as a surface light, a runway guide light, or a reflector, installed on various pavements or roads, by propelling a cleaning agent from a blast nozzle to the glass surface. The blast nozzle is installed on the front end of an arm of a working robot mounted on a truck. A truck mounted with a cleaning agent blaster and a working robot (21) provided with a blast nozzle (23) and a CCD camera (24) at the forward end of a manipulator is stopped at a specified position in the vicinity of an object to be cleaned, i.e. surface light or a reflection mirror (30). Based on an image of the object taken by the CCD camera (24), dimensions are recognized from distance information through processing by a vehicle-mounted computer, the image shape of the object is collated with a stored shape and recognized, and then positional information of the recognized object is searched. Cleaning agent is propelled from the blast nozzle (23) at the forward end of the manipulator (22) toward the object while measuring the extent of cleaning, brightness or light intensity of the cleaned object is determined by the CCD camera, and automatic cleaning is performed.

Selected Drawing: Fig. 1